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[21] Application No.: GCC/P/2002/2283 [22] Filing Date: 20/10/2002 [30] Priority: [31] Priority No. [32] Priority date [33] State 01204009.3 22/10/2001 EP [72] Inventors: 1- Franciscus Gerardus Van Dongen, 2- Winnifred De Graaf, 3- Thian Hoey Tio, 4- Anthonij Wolfert [73] Owner: Shell Internationale Research Maatschappij B.V., Carel van Bylandtlaan 30, 2596 HR, The Hague, The Netherlands [74] Agent: Suleiman Ibrahim Al-Ammar	[51] Int. Cl. ⁷ : C01B 3/38 [56] Cited Documents: - EP 0168892 A (SHELL INT RESEARCH.) 22 January 1986 - EP 0326662 A (UHDE GMBH) 09 August 1989 - EP 1043084 A (DAIDO TOKUSHUKO K K) JP 11 October 2000 - WO 9531579 A (SANDVIK AB) 23 November 1995 - EP 0819775 A (SUMITOMO METAL IND) 21 January 1998

[54] PROCESS TO PREPARE A HYDROGEN AND CARBON MONOXIDE CONTAINING GAS

[57] Abstract: A process for the preparation of hydrogen and carbon monoxide containing gas from a gaseous hydrocarbon feedstock by performing the following steps: (a) partial oxidation of part of the feedstock thereby obtaining a first gaseous mixture of hydrogen and carbon monoxide and (b) catalytic steam reforming of part of the gaseous feedstock in a Convective Steam Reformer comprising a tubular reactor provided with one or more tubes containing a reforming catalyst, wherein the exterior of the tubes of the tubular reactor is used to cool the hot gas as obtained in step (a) and wherein the exterior of the tubes is a metal alloy surface comprising between 0 and 20 wt% iron.

No. of claims: 11